CLAIMS

What is claimed is:

- 1 1. A method for selecting a scoring mechanism from a plurality scoring mechanisms for
- 2 processing queries, comprising the steps of:
- 3 for each scoring mechanism of said plurality of scoring mechanisms, determining, 4 based on a query, multiple parameter values for the scoring mechanism, 5 wherein each parameter value of said multiple parameter values indicates a 6 different characteristic associated with using said scoring mechanism for 7 processing said query; 8 for each scoring mechanism of said plurality of scoring mechanisms, generating a 9 score based on the multiple parameter values determined for the scoring 10 mechanism; and 11 selecting which scoring mechanism to use to process said query based on the score
- generated for each scoring system.
- 1 2. The method of Claim 1, wherein the multiple parameters values comprise a relevance
- 2 parameter that reflects the relevance of results that would be produced by the scoring
- 3 mechanism for said query, density of sponsored product items within results that would be
- 4 produced by using the scoring mechanism to process said query, and a user retention
- 5 parameter that estimates the likelihood that a user that issued said query will find the results
- 6 useful.
- 1 3. The method of Claim 1, wherein the multiple parameter values comprise a relevance
- 2 parameter value and the relevance parameter value is determined for each scoring mechanism
- 3 of said plurality of scoring mechanisms by having a human grade the results produced by
- 4 each scoring mechanism for one or more sample queries.

- 1 4. The method of Claim 1, further comprising the step of determining a relevance
- 2 parameter value for each scoring mechanism for each category of a plurality of product item
- 3 categories, wherein each product item category of the plurality of product item categories is
- 4 selected from the group consisting of a product category, a merchant category, and a product
- 5 abstraction category.
- 1 5. The method of Claim 1, wherein said query is a query received by a search
- 2 mechanism and one of said multiple parameter values is a density of sponsored product items
- 3 parameter value and the density of sponsored product items parameter value is determined
- 4 based on a percentage of sponsored product items in a result set that would be generated for
- 5 said query for each scoring mechanism of said plurality of scoring mechanisms, wherein a
- 6 sponsored product item is a particular product item for which a party associated with the
- 7 particular product item will or has been charged a fee for each inclusion of a reference to said
- 8 particular product item in results provided by said search mechanism, and wherein a product
- 9 item is selected from the group consisting of a merchant, a product offering, and a product
- 10 abstraction.
 - 1 6. The method of Claim 1, wherein one of the multiple parameter values is a density of
- 2 sponsored product items parameter value and the density of sponsored product items
- 3 parameter value is determined based on potential revenue that would be generated by using
- 4 the result set that would be produced for said query by using each scoring mechanism of said
- 5 plurality of scoring mechanisms.
- 1 7. The method of Claim 1, wherein said query is a query received by a search
- 2 mechanism and one of the multiple parameter values is a user retention parameter value
- 3 generated for each scoring mechanism of said plurality of scoring mechanisms and the user

- 4 retention parameter value is generated for the scoring mechanism based on a percentage of
- 5 users that return to a website associated with said search mechanism within a predetermined
- 6 time span after receiving results generated by the scoring mechanism.
- 1 8. The method of Claim 1, wherein said query is received by a search mechanism
- 2 associated with a website, wherein the method further comprises the steps of:
- 3 placing a cookie on a user's computer;
- 4 recording for each scoring mechanism of the plurality of scoring mechanisms when
- 5 the scoring mechanism is selected for use on a user query for the user;
- determining whether the user has returned to the website based on whether the cookie
- 7 is on the user's computer; and
- 8 calculating a user retention parameter value for each scoring mechanism of said
- 9 plurality of scoring mechanisms based on a percentage of users that have
- returned to the website within a predetermined time span after using the
- scoring mechanism, and wherein the user retention parameter value is one of
- the multiple parameter values.
- 1 9. The method of Claim 1, wherein said query is received by a search mechanism
- 2 associated with a website, wherein the method further comprises the steps of:
- 3 logging a user into a server;
- 4 recording for each scoring mechanism of the plurality of scoring mechanisms when
- 5 the scoring mechanism is selected for use on a user query for the user;
- determining whether the user has returned to the website based on a history for the
- 7 user; and
- 8 calculating a user retention parameter value for each scoring mechanism of said
- 9 plurality of scoring mechanisms based on a percentage of users that have
- returned to the website within a predetermined time span after using the

- scoring mechanism, and wherein the user retention parameter value is one of
- the multiple parameter values.
- 1 10. The method of Claim 1, wherein the step of selecting a scoring mechanism from said
- 2 plurality of scoring mechanisms comprises performing a functional composition of the
- 3 parameter values wherein the functional composition is selected from the group consisting of
- 4 a product of parameter values and a product of squares of parameter values.
- 1 11. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 1.
- 1 12. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 2.
- 1 13. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 3.
- 1 14. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 4.
- 1 15. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 5.

- 1 16. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 6.
- 1 17. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 7.
- 1 18. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 8.
- 1 19. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 9.
- 1 20. A machine-readable medium carrying one or more sequences of instructions which,
- 2 when executed by one or more processors, causes the one or more processors to perform the
- 3 method recited in Claim 10.